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FOREIGN AGRICULTURE

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U.S. Meal and Oil in World Trade
The Story of Pepper in Brazil
The Challenge of Nigerian Palm Oil

Foreign
Agricultural
Service
U.S. DEPARTMENT
OF AGRICULTURE

Prepared by the Staff, *Fats and Oils Division*
Foreign Agricultural Service

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This week's cover:

Artist's view of a soybean plant and the processing operation that releases valuable soybean oil. Soybean meal and oil were front-runners in world trade of meals and oils in the 1960's. For the full story see article beginning this page.

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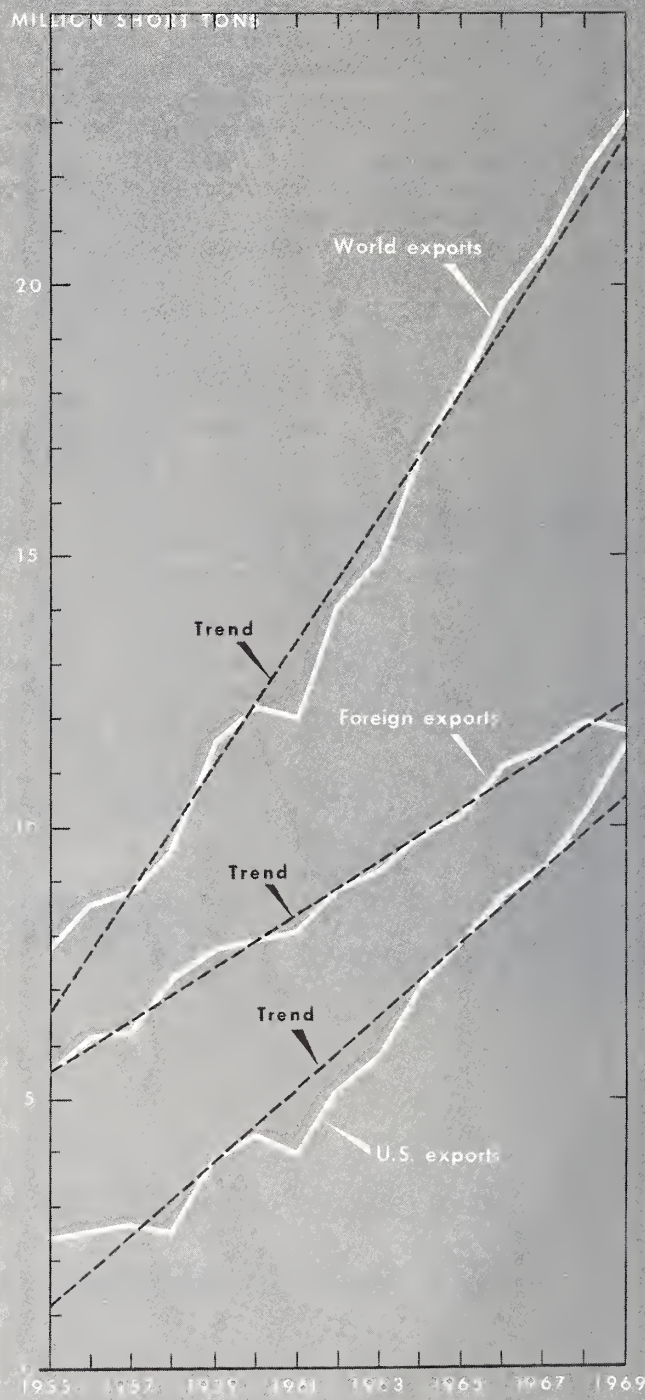
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TRENDS IN U.S. AND WORLD EXPORTS OF OILCAKES AND MEALS



includes meal equivalent of oilseeds and fish solubles as well as animal meal exports

U.S. Meal and Oil in World Trade

A decade of dynamic world demand for meal and oil has generated substantial increases in the production of oilseeds and marine products both here in the United States and abroad. While meal and oil are joint products, the demand for each has been governed by separate and distinct factors. The demand for meal, which is used primarily for feed, has been growing much more rapidly than the demand for oil, which is used mainly for food. Though production of animal fats—butter, lard, and tallow—has also risen, this has been due to the increase in production of meat and milk.

Meal is vital to livestock nutrition because of its high protein content. The demand for feed protein has been rising along with the expanding production of livestock and poultry, which has shown a high correlation with rising incomes and with expansion of the mixed feed industry in the developed countries.

Though many of these countries, chiefly in Europe as well as Japan, have deficits in both protein and oil, their deficiency has been greatest in protein, so that growth in their livestock and poultry production is particularly dependent upon imports. Imports enter both in the form of oilseeds for

crushing into oil and meal and directly as meal or oil. Those entering directly as meal now account for over one-half of the total, having grown substantially faster than net oilseeds imports as such.

Nutrition and the major meals

The nutritive value of a given meal largely reflects its crude protein content as well as its digestibility and quality. Quality is largely a matter of amino acid composition. Thus, soybean meal, with its relatively high percentage of crude protein, relatively favorable amino acid balance, and high coefficient of digestibility, can be used in feeding all classes of livestock and has gained wide acceptance. Fishmeal, showing the fastest growth rate in world exports among the major cakes and meals, is also a highly desirable product nutritionally—especially in poultry rations—owing to its amino acid makeup and its very high protein content; however, feeding rates are usually restricted to prevent the possibility of undesirable flavoring effects. Peanut, cottonseed, linseed, and sunflower cakes and meals are also relatively high in protein content and find wide usage in cattle and hog rations. Meals such as copra and palm kernel are relatively low in protein and high in fiber and fat; for these reasons, they are best suited to cattle feeding. Rapeseed meal also is for the most part limited to use by cattle. (In this discussion, the terms cake and meal are used synonymously, and figures in all cases include the meal equivalent of oilseeds.)

Meal export trends of the decade

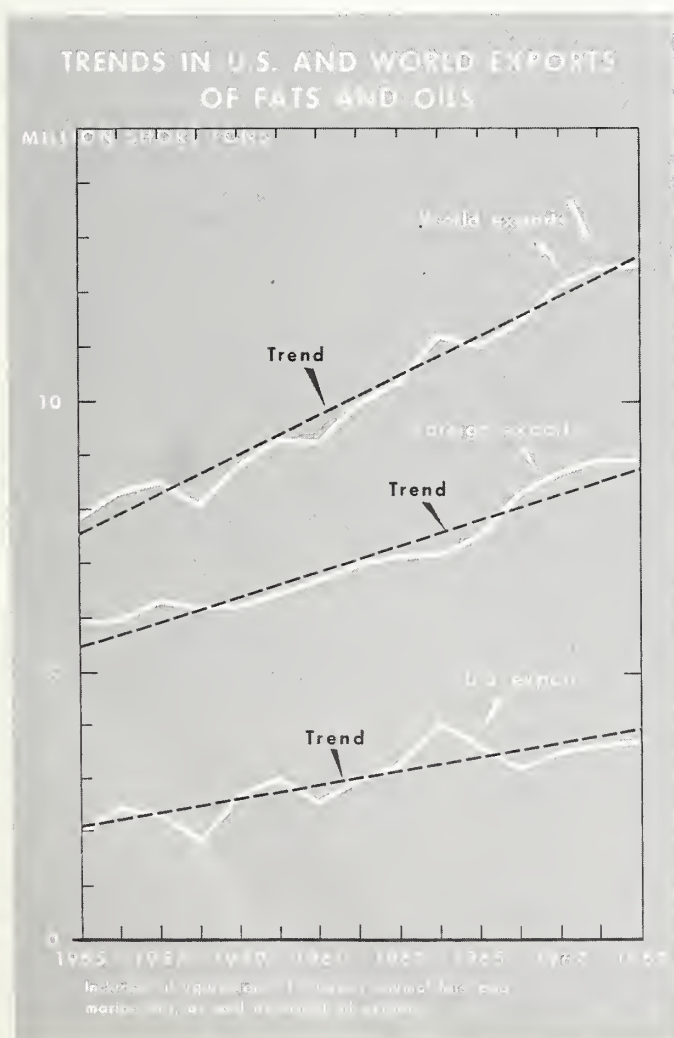
Since 1955 the uptrend in world exports of the major cakes and meals has averaged about 1.15 million tons annually, or 8.4 percent. Of the total annual average increase, U.S. exports accounted for the major share, expanding by about 670,000 tons annually, or 13.2 percent—a rate more than double the 5.6-percent annual average growth of foreign exports; and although the rates of growth in both U.S. and foreign exports have declined somewhat from earlier years, the U.S. growth rate margin has widened.

In 1969, world meal equivalent exports are estimated to have reached a record 23.2 million tons—5 percent above the 1968 volume. U.S. exports are estimated at 11.45 million tons, nearly half of the world total and 12 percent above 1968, while foreign exports declined slightly.

Soybeans and meal led

Largely responsible both for the rise in world meal exports since 1955 and for the 1969 record are exports of *soybeans and meal*. In 1955-59 they provided 39.4 percent of total meal exports; in 1969, 52.8 percent. They have grown at a rate of 10.7 percent.

In 1969 world exports of soybeans and meal are estimated to have increased to a peak volume of nearly 12.3 million tons, meal basis. This rise of 14 percent over the 1968 volume reflects substantially heavier movement from the United States and Brazil. The estimated proportion of soybean meal equivalent to world exports of all meals is 53 percent as against 49 percent in 1968. Soybeans are the only major commodity to still register an increasing export growth rate.



WORLD EXPORTS OF OILSEEDS AND MEALS ¹

Item	Average					Compound annual growth rate		
	1955-59	1960-64	1965-69	1968	1969 ²	1955-59 to 1960-64	1960-64 to 1965-69	Change 1969, from 1968
	Million short tons	Million short tons	Million short tons	Million short tons	Million short tons	Percent	Percent	Percent
WORLD EXPORTS								
Soybean	3.65	5.65	10.08	10.75	12.26	9.1	12.3	+14.0
Fish .....	.62	1.82	3.13	3.90	3.47	24.2	11.4	-11.0
Peanut	1.41	2.23	2.50	2.62	2.48	9.6	2.3	-5.3
Cottonseed .....	.82	1.11	1.37	1.27	1.32	6.2	4.4	+4.1
Sunflower .....	.35	.58	.85	.92	.85	10.6	7.9	-7.6
Others ³	2.40	2.61	2.84	2.64	2.82	1.7	1.7	+6.8
Total	9.25	14.00	20.77	22.10	23.20	8.6	8.2	+5.0
U.S. EXPORTS								
Total ⁴	2.74	5.23	9.49	10.20	11.45	13.8	12.6	+12.2
U.S. as a percentage of world exports ..	Percent 29.7	Percent 37.4	Percent 45.7	Percent 46.1	Percent 49.3	Percent 4.7	Percent 4.1	Percent +6.9

¹ Includes meal equivalent of oilseed exports. ² Preliminary. ³ Includes linseed meal, rapeseed, copra, and palm kernel meals. ⁴ Largely soybean but includes cottonseed, linseed, and other vegetable cakes and meals. Totals and percentages computed from unrounded data.

The marked rise in soybean meal exports this year reflects extremely heavy movement from new-crop beans in the United States in the October-December period. The reduced support price, together with a shortfall in exports of fish and peanut meals, has more than offset the effects of the U.S. dock strike which occurred earlier this year.

Fishmeal ran second

Fishmeal exports, the second largest meal in volume, have grown during the decade at an annual rate of 17.8 percent; they accounted for 15 percent of the total in 1969 as against 6.7 percent in 1955-59.

In 1969, these exports declined by about 11 percent from the 3.9-million-ton record of 1968. The decline was due to reduced catches in the major exporting countries—Peru, Norway, and Chile. Major exporting countries have in recent months drawn down their stocks in order to satisfy export demand. Much of the pinch in availabilities is being felt here in the United States, since imports through November of last year were down by 408,000 tons to less than half of the volume for the comparable 11 months a year ago.

Fishmeal exports, which are mostly from developing countries, have accounted for a larger proportion of production than is the case for most other commodities. Also, not only does the quantity of fish caught fluctuate more than acreage and yields of oilseed crops but the meal extraction rates are more variable than for most oilseeds. As a result, prices of fishmeal tend to fluctuate more widely than those of vegetable meals. During periods of scarce fishmeal supplies, the major net beneficiary is soybean meal. Such is now the case.

Although catches of industrial-type fish for meal production and export have been expanding sharply since 1955, there has recently been a sharp decline in their rate of growth. Fishmeal output is currently running below last year, but there is no evidence to support the conclusion that fishing in the aggregate has been overexpanded past the point of a maximum sustainable yield. While heavy fishing off the coast of Peru may be one of the factors that has influenced the current reduction in output, increased fishmeal prices would be expected to draw in larger output from areas thus far considered uneconomic.

Exports of most *other oilseeds and meals*, principally peanut and cottonseed, have experienced declining rates of

growth, which in the most recent 5 years were much below the aggregate average growth of all oilseeds and meals.

Export outlook for meal

The overall rate of growth in the meal sector since 1955 has been more than double the rate of expansion in fats and oils exports for the same period. To a large extent, as indicated, this meal export growth has paralleled the expansion in mixed feed production, and further growth is expected. However, several factors may tend to reduce the future rate of growth.

Overall livestock numbers in the major net importing countries have been increasing substantially slower than meal consumption. Thus, much of the growth in the international trade for meals to date has represented increased consumption of protein per livestock unit. Future feeding rates will tend to approach an optimum rate, and subsequently the rate of increase will decline.

Prices for high-protein feeds have increased substantially and now average about 35 percent above the 1960 level. At the same time, free-market prices of feedgrains have shown significantly lesser gains on an average, and those of corn have actually declined. This relative cheapening of carbohydrate feeds would cause a shift in the least-cost balance between proteins and carbohydrates and to some extent reduce the potential utilization of high-protein feeds.

Further protein price increases could cause foreign livestock and poultry producers to seek to cut costs by moving toward expanded use of cheaper substitutes of synthetics. High-protein-meal consumption in the United States is already being trimmed by the equivalent of over 3 million tons of soybean meal annually through expanding consumption of urea in cattle feed.

Future breakthroughs in research and development on high-lysine corn and petroleum protein could significantly curb future growth in world meal exports.

Oil export trends of the decade

Since 1955, world exports of the major vegetable, animal, and marine oils, including the oil equivalent of oilseeds, have been increasing by about 3.7 percent annually, or by an annual average volume of about 360,000 tons. For the past calendar year, they are estimated at a record volume of

12.5 million short tons or virtually the same as in 1968.

Of the total annual average increase, U.S. exports alone have accounted for 131,500 tons. For last year, the total volume of U.S. oil equivalent exports is estimated at a record 3.62 million tons, slightly above 1968. The United States leads the world in oil equivalent exports. Its share of the market is estimated to have increased slightly in 1969 to about 28.9 percent. This is, however, significantly less than the 31.5 percent averaged during the 1955-59 period.

Growth rates for major oils

Among the various fats and oils, world exports of *soybeans and oil*, in terms of oil equivalent, are by far the largest, accounting for nearly 19 percent of the total. Although this percentage has not increased much in recent years, there has been an appreciable increase in the tonnage moved. Most of this increase has been as soybeans from the United States.

Since 1955, the highest growth rate in oil equivalent exports has been registered by *sunflowerseed and oil*. Their sharp rise reflected increased availabilities from the Soviet Union and Eastern Europe, where production was increased by higher yields and the use of improved varieties having substantially higher oil content, although expansion in acreage

has been modest.

Growth in exports of *tallow and grease* has also been continuous. In 1969, however, exports are estimated to have declined slightly, for the most part because of reduced output in the United States. U.S. exports, which exceed 1 million tons annually, rank only behind soybeans in the fats and oils category; they account both for the major share of world tallow and grease exports and for a substantial share of total U.S. fats and oils exports—31 percent in 1968—on an oil basis. (Soybeans and soybean oil accounted for 58 percent of the total).

Although there is a general uptrend in total world oil equivalent exports, the growth has been limited to certain commodities—chiefly the edible vegetable oils and tallow and greases. Various other oil and fat categories, such as the marine oils, lard, and butter, have in recent years suffered declining growth rates. Total exports of palm oils have held steady, while exports of industrial vegetable oils have undergone a decline.

Foreign growth rate increases

Although total growth in world exports of vegetable and marine oils and animal fats has been about constant since

WORLD AND U.S. EXPORTS OF OILSEEDS AND OILS¹

Item	Average			1968	1969 ²	Compound annual growth rate		
	1955-59	1960-64	1965-69			1955-59 to 1960-64	1960-64 to 1965-69	Change 1969, from 1968
	Million short tons	Million short tons	Million short tons	Million short tons	Million short tons	Percent	Percent	Percent
WORLD EXPORTS								
Edible vegetable oils:								
Soybean	1.06	1.58	2.14	2.23	2.35	8.3	6.3	5.3
Sunflower .....	.13	.35	.96	1.25	1.15	21.7	22.5	-8.0
Peanut .....	.95	1.02	1.18	1.29	1.10	1.4	2.9	-14.5
Other ³ .....	.54	.70	.91	.88	.96	5.3	5.3	9.0
Total	2.68	3.65	5.19	5.65	5.56	6.3	7.3	-1.6
Palm oils:								
Palm oil .....	.61	.61	.69	.73	.84	-.1	2.7	14.9
Coconut	1.37	1.41	1.38	1.36	1.33	.7	-.4	-2.6
Other ⁴ .....	.45	.42	.38	.36	.38	-1.4	-2.0	7.2
Total	2.43	2.44	2.45	2.45	2.55	.1	.1	4.1
Marine oils, total ⁵ .....	.69	.85	.95	1.02	.98	4.4	2.2	-3.8
Animal fats:								
Butter .....	.47	.50	.54	.53	.53	1.4	1.4	0
Lard .....	.39	.45	.37	.40	.41	2.9	-3.5	1.2
Tallow and grease .....	.91	1.36	1.66	1.76	1.73	8.2	4.0	-1.4
Total	1.77	2.31	2.57	2.69	2.67	5.4	2.2	-.7
Industrial oils, total ⁶ .....	.73	.74	.74	.67	.74	.3	-.2	10.2
World total	8.30	9.99	11.90	12.48	12.50	3.8	3.6	.2
U.S. EXPORTS								
Soybeans and oil .....	.80	1.46	1.98	2.09	2.15	12.7	6.3	2.7
Tallow and greases .....	.69	.93	1.11	1.12	1.04	6.2	3.5	-7.3
All other ⁷ .....	.75	.76	.41	.38	.43	.3	11.6	13.3
Total	2.24	3.15	3.50	3.59	3.62	7.3	2.1	.7
U.S. edible oil exports as a percentage of—	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
World edible oil exports	39.0	48.4	41.8	38.7	40.8	4.4	-2.9	+5.4
World edible and palm oil exports ..	20.5	29.0	28.4	27.0	28.0	7.2	-.4	+3.7
Total U.S. fats and oils exports as a percentage of total world exports	26.7	31.5	29.4	28.8	28.9	3.4	-1.4	+3

¹ Includes oil equivalent of oilseed exports. ² Preliminary. ³ Includes cottonseed, rapeseed, sesame, safflower, olive, and corn oils. ⁴ Includes palm kernel and babassu oils. ⁵ Includes fish liver, fish body, whale, and sperm oils. ⁶ Includes castor, tung, and oiticica oils. ⁷ Includes largely cottonseed oil, lard, linseed, and fish oils.

Totals and percentages computed from unrounded data.

1955, there has been a marked shift in the fraction supplied by the United States.

U.S. exports in the 1960-64 period grew by 7.3 percent annually over the previous 5-year period. This significant growth rate—more than triple the rate of world population growth—supplemented foreign oil exports during a below-trend period when growth in foreign exports averaged only 2.4 percent annually.

Beginning with 1965, however, there has been a new spurt of growth in foreign oil exports, due largely to increased exports of sunflowerseed and rapeseed. The annual rate of growth in the foreign sector climbed to 4.2 percent. Squeezed by this bulge in foreign oil exports, growth in U.S. exports since 1965 on an oil basis has been cut to an average rate of only 2.1 percent annually over the previous 5-year period. It may be assumed that the unique factors which influenced growth in the foreign sector during the 1965-69 period have to some degree run their course. Nevertheless, instances of dynamic growth like the increase in sunflowerseed may occur among other commodities—for example, the sharp increase in palm oil exports which began just this year.

Although incomes in the developed countries may continue to rise, growth in oil consumption for food purposes in these countries is expected to be more in line with population growth, since consumption levels are already high and demand is inelastic. Consumption in many of the developing countries, however, is at a relatively low per capita level and is likely to increase at a faster pace.

Future technological changes will probably increase the intersubstitution among various oils and fats. Development of synthetic substitutes for fats and oils is also expected to continue. These developments will continue to exert a competitive influence on fats and oils prices.

Price trends

Meal.—Prices for the selected meals have trended upward over the decade. The increase reflects the expanded demand for livestock and poultry products which has been associated with growing prosperity in the developed countries during recent years.

Prices for soybean meal rose by an average 2.7 percent annually. During the last half of the 1960-69 period, fishmeal and linseed meal became more expensive than soybean meal, while peanut and sunflower meals cheapened.

In 1969, while soybean meal prices declined, fishmeal prices rose substantially, so that the price spread between the two meals was larger than normal. Peanut meal prices rose slightly. As a result, soybean meal became more competitive with these and some other meals. The relative price attractiveness and abundant supplies of soybean meal in 1969 are estimated to have resulted in above-trend increases in utilization.

Oil.—Prices for most of the selected oils and fats, however, have been trending downward on the long-term basis. This is because world per capita availabilities have been steadily increasing and demand is inelastic in the major cash markets.

Over the decade, prices for palm, sunflower, rapeseed, and fish oils have decreased at rates sharply steeper than those for soybean oil. These declines may in part mirror the pressure of expanded availabilities in surplus producing countries to capture a large share of the international market.

Interestingly, peanut and cottonseed oils, tallow, and lard

became more expensive than soybean oil during 1965-69. However, only prices for cottonseed oil and tallow trended higher.

In 1969, soybean oil prices averaged 9 cents per pound, 11 percent above 1968. Prices for other selected oils and fats also registered substantial gains, except for cottonseed oil. This overall increase is believed to have resulted largely from below-trend world production and exports.

Only palm and cottonseed oils had a smaller price spread relative to soybean oil in 1969 than in 1968; and only cottonseed oil registered some price decline. This smaller price spread between cottonseed and soybean oil represented a normalization from the abnormally large spread of 1968.

The joint product value of soybean meal and oil (bean basis) shows an uptrend averaging about 1.6 percent per year during the decade. The joint product value for peanuts, in contrast, was up only 0.3 percent per year. When compared with prices for the raw products, the apparent crushing margin decidedly favored soybeans.

PRICES FOR SOYBEAN MEAL AND OIL WITH PRICES AND PRICE SPREAD COMPARISONS FOR OTHER SELECTED MEALS AND OILS

Item	Average		Annual average change, 1965-69 from 1960-64	1968	
	1960-64	1965-69		1968	1969
	<i>Dol. per short ton</i>	<i>Dol. per short ton</i>	<i>Percent</i>	<i>Dol. per short ton</i>	<i>Dol. per short ton</i>
MEALS					
Soybean ¹ . . .	94.5	108.0	+2.7	109.2	105.5
Fish ²	116.8	149.3	+5.0	121.5	160.8
Spread . . .	+22.3	+41.3		+12.3	+55.3
Peanut ³	86.7	93.3	+1.5	89.6	92.3
Spread . . .	-7.8	-14.7		-19.6	-13.2
Linseed ⁴ . . .	85.1	99.3	+3.1	98.3	97.2
Spread . . .	-9.4	-8.7		-10.9	-8.3
Sunflower ⁵ . .	71.6	74.1		71.4	72.5
Spread . . .	-22.9	-33.9	+7	-37.8	-33.0
	<i>U.S. cents per lb.</i>	<i>U.S. cents per lb.</i>		<i>U.S. cents per lb.</i>	<i>U.S. cents per lb.</i>
OILS					
Soybean ⁶ . . .	10.6	10.2	-7	8.1	9.0
Palm ⁷	10.4	9.8	-1.2	7.7	8.1
Spread . . .	-2	-4		-4	-9
Sunflower ⁸ . .	11.6	10.4	-2.2	7.7	9.6
Spread . . .	+1.0	+2		-4	+6
Rapeseed ⁹ . .	10.9	9.6	-2.5	7.3	8.4
Spread . . .	+3	-6		-8	-6
Tallow ¹⁰	6.9	7.4	+1.4	5.8	7.5
Spread . . .	-3.7	-2.8		-2.3	-1.5
Lard ¹¹	10.7	10.6	-2	7.7	10.0
Spread . . .	+1	.4		-4	+1.0
Fish ¹²	9.2	7.2	-4.8	4.5	6.8
Spread . . .	-1.4	-3.0		-3.6	-2.2
Peanut ¹³	13.7	13.6	-1	12.1	15.0
Spread . . .	+3.1	+3.4		+4.0	+6.0
Cottonseed ¹⁴ .	10.9	12.3	+2.4	13.0	10.8
Spread . . .	+3	+2.1		+4.9	+1.8

¹ Canadian 45 percent c.i.f. European ports. ² Peruvian 65 percent c.i.f. European ports. ³ Indian: 1960-61—54 percent expellers; 1962-69—50 percent extractions, c.i.f. European ports. ⁴ Argentine 39 percent, c.i.f. European ports. ⁵ Argentine 37/38 percent, c.i.f. European ports. ⁶ Any origin, crude, ex-tank Rotterdam. ⁷ 1960-64 5 percent bulk c.i.f. European ports; 1965 and subsequent Malayan 5 percent bulk c.i.f. European ports. ⁸ North American bleachable, c.i.f. European ports. ⁹ North American bulk U.K. ports. ¹⁰ Peruvian semirefined, c.i.f. European ports. ¹¹ Nigerian, bulk, 3 to 6 percent c.i.f. European ports. ¹² American, crude, tank cars f.o.b. valley points.

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Agricultural Production Indices Down For 1969

By FLETCHER POPE, JR.

Foreign Regional Analysis Division, ERS

Agricultural production in Europe and the Soviet Union in 1969 failed to equal the record level achieved in 1968 by about 3 percent. Declines in farm output occurred in each of three areas—Western Europe, Eastern Europe, and the Soviet Union. Less favorable weather for agriculture in 1969 than in 1968 was the primary factor causing the decrease in agricultural output.

Western Europe

In 1969 Western Europe experienced a decline in agricultural output estimated at about 2 percent from the level achieved in 1968. However, 1969 production was roughly equal to that in 1967. During the period 1967-69, the indices of agricultural output for the European Community (EC) and for Western Europe as a whole were the same, reflecting the relative importance of the EC in West European agricultural production.

The slight decline in 1969 agricultural output in the EC was primarily attributable to a decrease in production in West Germany. Levels of production in the other EC countries were not significantly different from those in 1968. The decrease in value of agricultural output in West Germany was primarily due to a reduction in pork production and smaller potato and wheat crops.

Agricultural production in the non-EC countries of Western Europe did not change appreciably between 1968 and 1969. In 1969 output increased slightly in the United Kingdom and declined in Spain and Portugal; Austria, Ireland, and Switzerland production was at roughly the same level as in 1968. Farm production during 1969 in the Scandinavian countries, except Finland, was significantly lower than the high level achieved in 1968. In that year in Scandinavia agriculture benefited from exceptionally favorable weather, but during part of the 1969 growing season agriculture was affected by dry weather. Smaller crops were primarily responsible for the decrease in agricultural production in Sweden, Denmark, and Norway; a decrease in meat production also contributed to the decline in Denmark.

During 1969 significant increases in agricultural output in Western Europe were confined to Greece and Finland. Crop production in Greece increased sharply from the drought-induced low level of 1968, returning to a more normal level. The increase in Finland was a result of larger crops of oats and barley and more beef and veal.

Eastern Europe

The change in agricultural production between 1968 and 1969 in Eastern Europe as a whole was small, a decline preliminarily estimated at 1 to 2 percent. However, output changes for most of the countries individually were quite large. Because of a 1969 drought following a relatively favorable 1968 crop season, agricultural production in the northern countries of Eastern Europe—East Germany, Poland, and, to a lesser extent, Czechoslovakia—was much lower than in 1968.

Conversely, agriculture in the southern countries of Eastern Europe, except perhaps in Romania, fared much better in 1969 than in the drought year of 1968.

Soviet Union

Soviet agricultural output in 1969 was moderately smaller than the record 1968 level but about equal to 1966, the second best year. Production of most major crops declined and expansion of the livestock sector was limited. During 1969 weather was detrimental to agriculture: a severe winter adversely affected livestock and caused considerable winter-kill of fall-sown grains. A late spring delayed the start of grazing and progress in spring planting. Summer weather was generally cool and wet and precipitation hampered the harvest of most crops.

The official Soviet grain crop was reported at 160.5 million metric tons (bunker weight) in 1969. This quantity is 8.7 million tons below the 1968 crop and 10.7 million tons below the 1966 record. Wheat probably accounts for most of the decline in the 1969 Soviet grain crop. Nevertheless, the government's wheat supply from the 1969 harvest should cover domestic demand during 1969-70, and there should be no need to draw down the large wheat stocks accumulated in 1966 and 1968.

AGRICULTURAL PRODUCTION INDEX NUMBERS FOR
EUROPE AND THE SOVIET UNION, 1965-69¹
[1957-59=100]

Country or area	1965	1966	1967	1968	1969 ²
Belgium-Luxembourg	108	108	122	123	121
France	129	125	137	142	140
Germany, West	108	112	123	126	122
Italy	115	117	126	123	125
Netherlands	119	124	133	138	140
All EC	118	118	129	132	130
Austria	104	119	125	129	130
Denmark	117	117	118	122	115
Finland	129	120	126	128	135
Greece	135	134	143	123	132
Ireland	106	109	121	124	125
Norway	110	107	107	118	108
Portugal	103	90	110	112	107
Spain	115	129	134	149	146
Sweden	116	105	117	123	108
Switzerland	107	111	121	124	123
United Kingdom	132	131	137	135	138
Western Europe	119	120	129	132	130
Bulgaria	135	156	152	134	150
Czechoslovakia	94	111	116	126	121
Germany, East	111	111	122	123	109
Hungary	109	116	121	123	132
Poland	122	128	133	139	125
Romania	125	143	142	137	141
Yugoslavia	107	133	129	125	138
Eastern Europe	116	127	130	131	128
Soviet Union	116	137	134	144	138

¹ West European regional price weights were used in calculating all of the indices of agricultural output presented in this table. Also, the indices for the various countries of Western Europe are limited in coverage to 12-18 crops and livestock products. Thus, these indices will differ from those calculated by the various countries. ² Preliminary.

Indian Crop Prospects Dampened by Subnormal Precipitation

In a statement reassuring the public that the food situation was still "comfortable," Indian Minister of State for Food and Agriculture Shinde said in January that despite some adverse factors, grain production in 1969-70 would be at least 96 million to 98 million tons. This is some 5 percent below the production level anticipated in October 1969, and only marginally higher than the record 1967-68 crop. With imports already arranged, grain supplies appear reasonably adequate. However, vegetable oil seems likely to be crucially short, with prices tending toward prohibitive levels.

Grain prospects

In early October grain crop prospects seemed promising as good to excellent rains had fallen during the 1969 monsoon season (June-September). Oilseed and cotton growing areas had less precipitation but prospects for these crops still appeared good.

However, October-December precipitation through most of north India was markedly subnormal. In Indian terms rains were "deficient to scanty," 20 percent to more than 60 percent below normal, and in some areas almost totally absent. This curtailed production of winter as well as some summer grains. Fairly widespread but light rains around mid-January were not sufficient to afford significant relief. However, if forecasted midwinter rains occur they could do much to prevent further deterioration and would somewhat enhance prospects.

This shortage in northern India was partly compensated for by excellent rains in the south—where about 30 percent of the rice is grown. There, despite extensive storm damage in one important rice producing area, adequate moisture improved rice prospects.

However, the improvement in the south seems to have been more than offset by the decline in production in major rice areas in the Gangetic Plain and surrounding area where 50 percent of India's rice is grown. The net result is perhaps

as much as 5 percent less rice than was indicated in early October. A record crop of 40 million tons or more still is anticipated.

In northern India winter pulse crops and about 35-40 percent of the acreage of unirrigated wheat were suffering from lack of moisture in early January. For wheat, irrigation and perhaps some expansion in high-yielding varieties may compensate for the dry weather, and production may equal or exceed the 18.7 million tons produced last year. However, the substantial increase in production which was predicted earlier does not seem likely to occur. Winter pulses are grown almost exclusively as a dryland crop and production seems likely to be seriously damaged.

Rising Prices

Pulse acreage and production have trended downward in recent years as wheat becomes more profitable. With poor crop prospects, pulse prices in early January at Rs 125 (US \$16.75) per quintal had already exceeded the record of Rs 120 (\$16.00) set in 1967 and far surpassed last year's Rs 100 (\$13.33). Wheat prices also are rising higher than the usual seasonal level. In early January, Desi, or domestic wheat was quoted in Delhi at Rs 120 per quintal (\$4.33 per bu.) compared with Rs 80-90 (\$10.66-\$12.00) for newer varieties.

Mustard and rapeseed production have also been affected by the dry weather in the Indo-Gangetic Plain. Deterioration of this mixed crop plus failure of the peanut crop to live up to expectations have pushed peanut oil prices to an exceptionally high Rs 4,400 (\$586.66) per tons in early January. With the economy continuing strong the demand for cooking oils is expanding. Although prospects for oilseed production are for an increase over that of a year ago, they are below average for the second consecutive year. A price spiral seems likely unless substantial imports are made.

—Based on dispatch from JAMES H. BOULWARE
U.S. Agricultural Attaché, New Delhi

Australia Considers 1970-71 Wheat Delivery Quota

Members representing the various State organizations of the Australian Wheat Growers' Federation have agreed to a 14-percent reduction in the 1969-70 delivery quota—from 357 million bushels to 308 million bushels—for the 1970-71 season. The Ministry for Primary Industry, the Treasury, and State Governments are now considering the recommendations. The quota reduction is not uniform in all States; the total has been calculated on a different formula with the largest cuts in the soft wheat areas.

Under the proposed quota system for 1970-71 the reduction from the 1969-70 quota is small in Western Australia and Queensland, while other States' quotas are on the average about 22 percent less than in 1969-70. For 1970-71 the basic national quota would be 288 million bushels, composed of 92 million bushels from New South Wales, 52 million bushels from Victoria, 36 million bushels from South Australia, 83 million bushels from Western Australia, and 25 million bushels from Queensland. Because of the ready salability of hard wheat, however, New South Wales would receive a special additional allocation of 14 million bushels, composed of about 7 million bushels of prime hard wheat and 7 million bushels of northern hard wheat; Queensland would receive a

special allocation of 6 million bushels for prime hard wheat, provided that this extra wheat is available. For the 1969-70 season the special allocations were 7 million bushels of prime hard for New South Wales and 6 million bushels for Queensland.

The proposals are subject to the Commonwealth Government's agreement to maintain the first advance payment of \$A1.10 per bushel for the 308 million bushels to be delivered under the quota.

The Federal Government's position on the changes is not yet known; the final decision seems to depend largely on the position that the Treasury takes. The Australian Wheat Board still owes the Rural Credits Department of the Reserve Bank about \$A250 million from the advance on the 1968-69 crop; about \$A440 million is now being advanced for the 1969-70 crop. With a projected carryover of more than 346 million bushels at the end of 1970, it is obvious that financing of the 1970-71 crop will be a major factor in the Federal Government's decision about the new quota recommendation.

—Based on dispatch from
Office of U.S. Agricultural Attaché, Canberra

The Story of Pepper Production in Brazil

By JOHN C. McDONALD
*U.S. Agricultural Attaché
Rio de Janeiro*

Brazil is one of the world's largest producers of black and white pepper. Its entire outturn of 10,000 metric tons in 1969 came from some 6 million vines that trace their ancestry to a mere three seedlings brought from Singapore by Japanese immigrants in 1933.

It happened this way: The first official wavelet of immigrants from Japan—165 families—arrived in the State of São Paulo in 1909. Over the years a total influx of about 250,000 has contributed immeasurably to the development of agriculture in Brazil. Today, three-fourths of the Japanese—most of them now Brazilians—live in São Paulo, where they account for 10 percent of the farm population and 30 percent of the agricultural production in Brazil's richest and most dynamic State.

However, some of the Japanese families that emigrated to Brazil did not choose São Paulo but went much farther north to the State of Pará. The first families—43 of them—came to Pará in 1929, and two more groups followed in that year and the next. They settled at Tomé Açu on a grant of 600,000 hectares, intending to specialize in cacao and rice production. They shortly gave up on cacao, but those who stayed on turned to producing vegetables for their own cooperative.

The first seedlings

Meanwhile, in 1933 a shipload of Belém-bound Japanese immigrants paused in Singapore to bury an elderly passenger. While ashore, a representative of the colonization company bought 20 pepper seedlings. Only three roots survived the voyage and subsequent replanting, and they have since multiplied 2 million times apiece. Here, within the reaches of the Amazon jungle, the initiative and industry of a tiny fraction (1.1 percent) of Brazil's Japanese colony have made pepper Pará's most valuable agricultural product. In 1968 pepper production there was valued at NCr\$14,679,462 (US\$5,435,000). The Japanese also are the principal pro-

ducers of vegetables, poultry, eggs, and tea in the region. They introduced jute, too, but later abandoned it largely to others. (See *Foreign Agriculture*, Nov. 17, 1969.)

Half of Pará's pepper vines are owned by the 330 families associated with the Cooperative Agricola Mista (Mixed Agricultural Cooperative). Last year, they accounted for half of the estimated 10,000 tons of pepper produced. (Heavy rains cut into the usual outturn of about 12,000 tons.) The cooperative has an office, warehouse, fuel-oil boat and dock, and pilot pepper-oil extraction plant in Belém. Generally, nonmembers produce another 2,000 tons in Tomé Açu and 3,000 to 5,000 tons on farms near Belém.

According to Noboru Abe, managing director of the cooperative, pepper vines produce about a half pound of pepper in their second year, about 4.5 pounds the following year, and 6.5 to 8.8 pounds during the fourth to eighth years. After that, production declines, and a vine is a candidate for replacement at 12 or 13 years of age. Vines in Pará flower in February, and the pepper is harvested from August to November. One hundred pounds of harvested black pepper seeds are reduced to 30 pounds of product by immersion in hot water and drying in the sun. Turning black pepper into white is the result of a dozen days of soaking in water followed by peeling, washing, and sun drying.

Exports begin

Exports of pepper from the area began in 1955. By then, production had exceeded national consumption, and the cooperative was given permission to export the *pimenta do reino* or "king's pepper" as it has been called since the days when England controlled the world's supply. The United States took about half the estimated 8,000 tons exported in 1969. Other regular customers are Europe, Latin America, Canada, and Japan. Europe's preference for white pepper is reflected in its purchases—70 percent white and 30 percent black. U.S. purchases, on the other hand, are 90 percent black. Argentina is the only user of white pepper in South America.

Pepper prices were high in 1969 because of the failure of the crop in Indonesia, which ordinarily is the No. 2 producer

Pepper grower Guilherme Kato (wearing hat) guides visitor Raimundo do Teixeira, Brazilian employee of the U.S. Consulate in Belem, around his farm; left, rows of vines; right, pepper drying in the sun.



after India. Average crops in those two countries are 25,000 and 30,000 tons, respectively. The Malaysian State of Sarawak is next with over 20,000 tons. World production usually amounts to somewhat less than 100,000 tons, with the Malagasy Republic and several other countries accounting for only 6,000 tons in all.

Prices, payments

Export prices, which were US\$500 per ton, f.o.b. Belém, in 1968 for Class I black pepper, soared at one time in 1969 to \$1,100; by December they had declined somewhat to \$850. White pepper was priced at \$1,100 in December. In general, prices for dry pepper have been so attractive that production of oil has halted in the cooperative plant, which has a capacity of 650 pounds per month.

Payments to producers are now about 70 cents per kilogram (\$700 per ton) for Class I black pepper and 98 cents (\$980) for Class I white pepper. They are tax exempt.

The story of pepper in Brazil points out but one aspect of

the contribution to the country's agriculture made by its Japanese settlers. According to a 5-year-old study, the Japanese account for not only 82 percent of Brazil's pepper output, but also 50 percent of its green vegetables, 92 percent of its tea, 90 percent of its oranges, 50 percent of its peaches, 14 percent of its potatoes, 50 percent of its tomatoes, 44 percent of its eggs, 21 percent of its peanuts, 13.7 percent of its cotton, and 8.8 percent of its coffee.

The significant role of the Japanese colony in modernizing agriculture and furthering the cooperative movement was pointed up recently when President Garrastanzu Médici named a *nisei* to be Minister of Industry and Trade. This first descendant of the Japanese to become a cabinet member is Fabio Yassuda, who was managing director and vice president of the nation's largest farm cooperative, Cotia. He also happens to be the son of one of three envoys sent here by the Japanese Government in 1906 to negotiate terms for the emigration of colonists—paving the way for the story of pepper production in Brazil.

Burma's Production of Cotton Continues To Decline

The general downtrend in Burma's cotton acreage and production continued in 1968-69 when cotton production declined to about 50,000 bales (480 lb. net). This compares with a peak of about 95,000 in 1961-62.

No appreciable progress is being made toward the government's goal to increase cotton production. The chief reason is the lack of incentives for farmers to grow cotton. All the cotton produced must be sold to the government at set prices which farmers consider unattractive. In the cotton-growing areas, many farmers prefer to grow other crops, especially peanuts. The marketing of peanuts is not controlled by the government, and they bring a higher return than cotton.

Official estimates indicate that production will increase to 75,000 bales this year (1969-70). However, such estimates for the past 3 years have been on the high side, and recent reports point to some crop failure in Shwebo, a major cotton-growing area. A more likely total output this season would be in the range of 55,000 to 60,000 bales. In view of the importance attached by the government to cotton production, it is possible that price inducements, compulsory production, control of irrigation water, and/or other measures will be introduced to increase the harvest.

Varieties produced

The cotton produced in Burma consists principally of two short-staple varieties ($\frac{5}{8}$ inch), one medium-staple variety ($\frac{7}{8}$ inch), and one long-staple variety (1-1/32 inches). The government encourages planting of the long-staple variety for use in domestic spinning mills. However, acreage devoted to this kind of cotton has shown little variation in recent years, averaging slightly less than one-third the total cotton acreage.

There has been a slight increase in total irrigated acreage of all cropland in Burma, but the irrigated acreage devoted to cotton has declined. In the last three seasons, about 40-45 percent of the acreage devoted to cotton has been irrigated.

Burma's trade in cotton is small. Since the early 1960's the country has not imported any raw cotton, according to available information. In the 1960-62 period, Burma imported approximately 10,000 bales from the United States. Small quan-

ties also were imported from Pakistan because domestic production of the longer staples was inadequate while output of short staples was more than required by local mills. Whether cotton is imported in the future will depend on such factors as the development of the textile industry and its raw material needs, the trend in local cotton production to supply those needs, and government policies—including allocation of foreign exchange for imports of qualities not available domestically.

Exports of raw cotton declined from around 75,000 bales in 1961-62 to less than 1,000 in 1968-69. Burma exported sizable quantities of the short-staple varieties, principally to Hong Kong, Mainland China, and Japan. Exports may remain negligible or even cease in view of the general decline in cotton production and the fact that the government plans to expand spinning capacity.

Cotton products

In recent years, Burma has preferred to import cotton yarn, thread, and cloth rather than raw cotton. However, imports of textiles are declining, reflecting a drop in foreign exchange and hopes that cotton production can be increased and the country can become self-sufficient in cotton textile production. The main sources of imported textiles are Pakistan, Mainland China, India, Hong Kong, Yugoslavia, and India.

Cotton consumption has remained in the range of 50,000 to 55,000 bales annually for the last 5 years, except for a rise to about 73,000 bales in 1967-68 when production broke the general downtrend. There are now 18 textile mills (spinning and weaving) in Burma, according to official reports. Three more are under construction. All of these mills are state owned. The total number of spindles was 150,000 on December 31, 1967, according to the latest information available from the International Federation of Cotton and Allied Textile Industries.

In addition to the commercial textile mills, there are about 40 small hand-spinning establishments producing 5's and 10's count yarn. There are also thousands of hand looms in the country's many small villages.

The Oil Palm Challenges Nigeria

By ODIGIE ONIHA, *Senior Agricultural Assistant*
Office of the U.S. Agricultural Attaché, Lagos

Nigeria, which has more oil palm trees than any other country in the world, is trying to revitalize both its domestic palm oil industry and its exports. Within the country, palm oil is important as a cash crop to farmers and for use as cooking oil and an ingredient of soap. As exports, palm oil and palm kernel oil (derived from the same tree) earn foreign exchange for the country.

But Nigerian production and exports of palm oil have both been seriously disrupted in recent years. Internal production has been discouraged by poor producer prices, and civil war has slashed output in the main oil palm area. Exports have fallen drastically because of poor world prices for palm oil, heavy competition for sales by palm oil from Malaysia and Indonesia, and sharply reduced domestic supplies.

Exports of another product of the oil palm—kernels—have also decreased. But only part of the drop is because of lessened supplies. Kernels that used to be exported are now processed within the country to obtain palm kernel oil, which is exported. Byproducts of processing palm kernels, palm kernel cake and meal, are also sold abroad.

Traditional production

Oil palms (*Elaeis guineensis*) are native to tropical western Africa and grow wild in many areas, including much of southern Nigeria. The greater part of the palm oil and palm kernels produced in Nigeria is obtained from palm groves in their natural state. The native trees are chiefly of the dura variety, which produces fruits with a thin fleshy layer (from which palm oil is obtained), a rather thick shell, and, inside the shell, a large kernel.

Farmers gather the oil palm fruits, which grow in bunches at the top of the palm, when they feel returns from selling the fruits or oil processed from the fruits will adequately reward their labor. Traditionally, farmers extract oil from the fleshy layer of the fruit with simple equipment by a process of fermentation, boiling, pounding, and churning. Only about 50 percent of the oil content of the fleshy layer is recovered by such methods, and none of the oil content of the kernel is obtained. The quality of the oil traditionally processed is often poor.

Palm kernels, which store well, are saved and transported to the coast for export. Importing countries extract oil from



Above, palm kernel crushing plant in the Western State. Below, drums of palm oil ready for export.



NIGERIA'S EXPORTS OF PALM OIL, PALM KERNELS, PALM KERNEL OIL, AND PALM KERNEL CAKE AND MEAL

Year	Palm oil		Palm kernels		Palm kernel oil		Palm kernel cake and meal	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	Long tons	Dollars	Long tons	Dollars	Long tons	Dollars	Long tons	Dollars
1960	183,360	39,149,600	418,190	72,973,600	—	—	—	—
1961	164,592	37,035,194	410,628	55,688,357	—	—	851	59,855
1962	118,668	25,005,316	366,628	47,282,715	850	16,363	¹ 900	61,899
1963	125,683	26,222,369	398,307	58,291,772	3,153	538,476	¹ 1,300	108,228
1964	134,223	30,133,667	394,188	58,696,610	863	263,317	¹ 2,200	152,118
1965	150,007	38,055,399	415,506	74,314,472	949	316,430	¹ 4,000	308,282
1966	143,834	30,798,082	393,955	62,280,436	32,085	9,214,399	34,251	3,138,858
1967	16,466	3,527,118	162,503	21,832,014	37,188	10,144,839	40,374	2,915,110
1968	3,341	398,574	159,014	28,483,831	26,831	9,313,046	30,431	2,352,022

¹ Estimated.

Federal Office of Statistics, Lagos.

the kernels and use the residue, palm kernel cake and meal, as animal feed.

Production stimulates and innovations

Nigeria's push to improve production and exports is four pronged. First, farmers are being encouraged to plant trees in plantations and cultivate them rather than harvest natural groves. Plantations, if properly cared for, have higher yields than natural tree stands. Second, considerable work is being done to improve the type of oil palms available for plantation cultivation. Third, better processing methods and equipment are being adopted so that extraction efficiency from oil palm fruit is increased, oil of better quality is obtained, and oil can be extracted from kernels. Fourth, internal marketing and export systems are being strengthened to help producers, and research is being carried out to improve both products and production.

Plantation encouragement.—Dissemination of information to farmers about plantation production of palm oil fruits is carried out both by the ministries of agriculture of each state government within the Nigerian federation and by the Nigerian Institute for Oil Palm Research (NIFOR). Farmers can get information from agricultural extension workers, printed matter, film and slide programs, agricultural shows, and visits to the Institute.

Stock improvement.—NIFOR, founded in 1964, has furthered the improvement of oil palm trees cultivated in Nigeria by breeding and distributing superior oil palm stock. In NIFOR's nurseries flowers of the native dura variety of oil palm, which has a thick-shelled kernel and only a thin fleshy layer in the fruit, are pollinated from the flowers of the pisifera variety, which has fruit in which the small kernel is without shell and the fleshy layer is thick. The resultant cross, when it becomes of bearing age, has fruit with a thick fleshy layer, a thin kernel shell, and a large kernel. This cross gives excellent yields of both palm oil (from the fleshy layer) and palm kernel oil.

Seedlings of the oil palm cross are distributed by NIFOR to Nigerian farmers at a price of about US\$0.025 each. In 1966 about 10 million seedlings were supplied to various farms and organizations in Nigeria and Ghana.

Poor Weather Triggers Tight Supplies of India's Fats and Oils

A complicated tangle of human factors and weather conditions has resulted in less volume of fats and oils on the Indian market and rather sharp price rises. Delay of the peanut harvest in the south because of rains and cloudy weather, a disruption in the movement of the new crop to consuming centers, larger demand for oil by vanaspati (shortening) manufacturers because of the nonrelease of soybean oil by the Indian Government for over a month, uncertainty about future imports of soybean oil or copra or tallow, dry weather in the north that has probably decreased production of such oilseeds as rape and mustardseed, inflation, farmers withholding crops and speculative trading all have played a role.

The demand for cooking oils and shortenings is expanding in India as its economy makes progress. Even in years in which the weather has cooperated, Indian agriculture has barely been able to produce enough oil-bearing materials to meet demand. When supplies look short, prices tend to soar.

After a steep price rise for peanut oil in Gujarat State at

NIFOR has also given much attention to plant diseases that affect oil palm seedlings.

Processing advances.—Because oil palm fruits deteriorate rapidly, they must usually be processed for palm oil in farm villages. In recent years hydraulic hand presses, adapted by NIFOR's research engineering division, have been distributed. Such presses allow extraction of up to 80 percent of the oil content of the fleshy layer and enable production of oil of better quality than that extracted by traditional methods.

In 1966 a palm kernel crushing plant was opened near Lagos—Vegetable Oil Nigeria. Ltd. (VON). Its annual crushing capacity is about 100,000 long tons. The Western State Government has controlling shares in the plant, and the factory's supplies of palm kernels are produced in the Western State. Before the plant was established, palm kernels were processed on a very limited scale within Nigeria to obtain palm kernel oil and palm kernel cake and meal.

Marketing and research.—The internal marketing of palm produce in Nigeria is supervised by regional marketing boards, which have the responsibility for securing favorable arrangements for the purchase, delivery, sale, and shipment of produce in the interest of producers and the areas of production. The marketing boards bear the cost of transporting palm kernels and palm oil from the local buying stations to mills and ports of shipment. Most are delivered by road.

The marketing boards have set defined grades and standards and scales of producer prices for palm produce in an effort to provide incentive to producers for higher quality.

Foreign shipments and external sales of oil palm products are handled by the Nigerian Produce Marketing Company, Ltd. The Federal Government has instituted a spot inspection and pest control service at ports to help upgrade Nigerian shipments.

Research is being conducted by the Nigerian Stored Products Research Institute on one of the chief quality problems of stored and shipped palm oil and palm kernel oil—free fatty acid. The higher the percentage of free fatty acid in a consignment, the greater its tendency to harden. Research is also being done on the changes in color that can occur in palm oil in transit from Nigeria to the importer and how these color changes can best be prevented or reversed.

the end of 1969, the State Government at the beginning of January 1970, placed limitations on exports of oil and raw peanuts to neighboring states in an effort to conserve stocks within the State and to hold down prices.

Peanut oil prices subsequently dropped somewhat within the State because of fears of government intervention to set prices, lack of buying support from the vanaspati manufacturers, and selling off of stocks by speculators. But prices are still high and will probably remain so for several months.

Further, action by Gujarat State to help local consumers may create a peanut oil shortage in neighboring states, such as Maharashtra, which depend on Gujarat for supplies.

Finally, traders in India may have been overly pessimistic about the damage done to southern peanut crops by the rainy weather. Their estimates for the 1969-70 harvest are around 4.8 million metric tons in shell. It may turn out that the actual crop is more in the neighborhood of 5.2 million tons, or only down slightly from original expectations.

Texas-Size Overseas Food Buyers Conference Set for May in Houston

The thoughts of food buyers the world over will turn to Texas this spring as they make plans to attend the Overseas Executive Food Buyers Conference in Houston May 3-6. The Conference will be held in Houston's famed Astrodome as part of the Super Market Institute's 33rd Annual convention and educational exposition—the largest exhibit of American foods and food-related products ever assembled in one place at one time.

The USDA will sponsor the Conference in cooperation with the Super Market Institute (SMI)—the world's largest food distribution trade association whose membership includes 850 U.S. food retailers and wholesalers, as well as food dealers in 23 countries.

The first Conference of this type—held in 1969 in Atlantic City—drew more than 100 top food buyers from Europe, Africa, the Middle East, the Far East, and Latin America, and was so highly acclaimed by the overseas visitors and U.S. tradesmen alike that plans are being made for an even larger attendance this year.

Visitors described last year's conference as "highly educational" because of new ideas picked up and "commercially valuable" because of new trade contracts that were made.

This year's conference will provide a unique opportunity for international food executives and buyers to hear reports on the latest developments in food technology, distribution, and merchandising; to see and buy the newest American food products and food related equipment and supplies; and to become acquainted with principal representatives of the American food industry.

Among the features planned for the conference is a series of seminars and workshops on profit-making techniques

for use in retail food stores around the world, plus seminars on expanding international trade. Language assistance will be available for overseas visitors, and SMI is planning to use a simultaneous interpreting system.

A "Moon Lounge" will provide a comfortable setting for overseas buyers and U.S. trade representatives to meet, discuss products, and arrange sales. In addition, private conference rooms will be available for use.

Visitors to the conference will have the added attraction of exploring Houston—the industrial and commercial giant of the American Southwest and home of NASA where the American moon men trained for their historic flight.

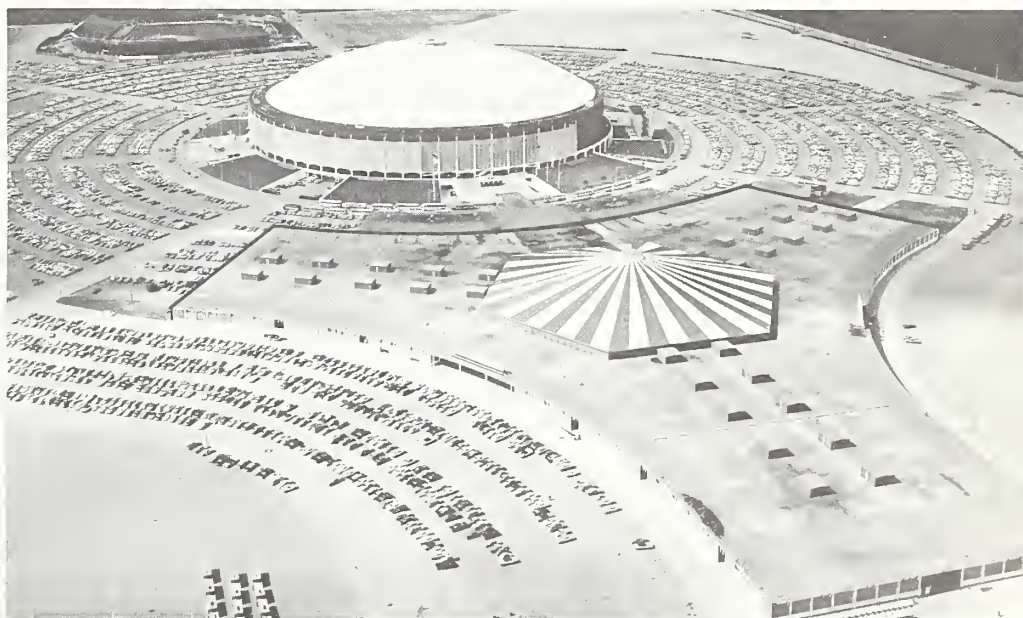
In order to acquaint overseas food trade executives with plans for the conference, three U.S. business leaders will be speaking in eight European cities during February and March. Michael J. O'Connor, executive director of SMI, will discuss the convention and accompanying Conference. Judge Roy Hofheinz president of the Houston Sports Association (which owns the Astrodome), and Paul Haney, former "voice of the astronauts," will describe Houston.

Additional information may be obtained from U.S. Agricultural Attachés abroad or by writing to Houston Conference Coordinator, International Trade Fairs Division, Foreign Agricultural Service, USDA, Washington, D.C. 20250.



Above, food executives and buyers who attended last year's conference in Atlantic City's Convention Hall were attracted to the more than 600 exhibits set up as part of the Super Market Institute's Convention.

Houston's mammoth Astrodome, foreground, will be the site of the 1970 SMI Convention—the largest exhibit of American foods and food-related products ever assembled in one place at one time—and the accompanying Overseas Food Buyers Conference.



Below, entrance to London's Hotelympia '70 with its more than 370 exhibits. Right, the "new products" area of the U.S. exhibit was a real traffic stopper. Visitors saw and sampled over 100 new American food products.



U.S. Foods Score High at Hotelympia

At Hotelympia, the world's largest catering, hotel, and industrial trade show, held in London last month, 370 exhibits vied for the attention of hoteliers, canteen managers, restaurateurs, home economists, and others who determine the source of volume food buying in Great Britain and other European countries. The U.S. exhibit, manned by 7 cooperator groups and 20 representatives of American food firms, was one of the biggest crowd drawers.

Traffic was particularly heavy in the "new products" area where visitors saw and sampled over 100 new U.S. food products. Among the new products were Mexican foods, aloha riblettes (Hawaiian-style treats, flame roasted and cooked with an oriental sweet sour plum sauce), and chicken cutlet Romanoff, turkey salami, and an assortment of crepes. At

the demonstration theater, Dr. J. J. Wanderstock of the Cornell University School of Hotel Administration demonstrated and explained the new foods and suggested ways of incorporating them into appealing menus.

On-the-spot sales of U.S. products totaled over \$560,000 and sales contracted during the 9-day show are expected to reach over \$2.5 million during the next 12 months. U.S. exhibitors established a number of new contracts, some representative ones are: A \$24,000 annual account established by a seasoning company, an arrangement to fly \$20,000 worth of U.S. fresh produce to Libya each week, 75 new direct-sale customers for a U.S. meat company, and 10 new customers for an instant potato product company. Large contracts were signed for honey and frozen shrimp.

U.S. Turkey for Takeout a Success in Tokyo

In a recent promotion of U.S. turkey in Tokyo the two participating supermarkets sold twice as much meat as originally expected—in fact one supermarket sold out a 3-day anticipated supply in less than 1 day. The big seller was a convenience food—fried turkey prepared for takeout—with marinated turkey cutlets a close runner up.

The promotion was the first step of a campaign to sell U.S. turkey in Japan which is being conducted by Prima Ham, one of Japan's most important meat distributors. The Institute of American Poultry Industries (IAP) is supporting the campaign.

In the next stage of the campaign, Prima and IAP will launch a similar promotion in 100 Tokyo retail outlets. By the end of 1970 the turkey will be offered through some 16,000 Prima outlets throughout Japan.

Although turkey has been sold before in Tokyo with limited success, Prima's

approach during the recent promotion was different. First the U.S. inspected and graded turkeys were completely deboned in Prima's home plant, then the meat was transported to the supermarkets where Prima's home economists, who

had received special training in the IAP Tokyo kitchen, showed the meat department of the supermarkets how to further process the turkey. Samples were offered to the customers and a survey was made of customer reaction in both stores.

Fried turkey for takeout wins smiles of approval from these Tokyo housewives.



CROPS AND MARKETS SHORTS

Livestock and Meat Product Exports

Livestock and meat products provided a bright spot in the 1969 picture of U.S. agricultural exports. The value of total agricultural exports declined by 5 percent, from \$6.2 billion to \$5.9 billion. Exports of livestock and meat products, however, rose from \$427.1 million to \$517.7 million, an increase of almost 21.2 percent. Two developments in 1969 are worth noting: both the quantity and the value of red meat exports increased; and hides and skins replaced tallow and greases as the No. 1 livestock export item in terms of value.

The value of total red meat exports—\$93.9 million—set a new record for the decade; the quantity—190.0 million pounds—was exceeded only by the high of 199.1 million pounds in 1964. Greater pork shipments, of which 44 percent went to Japan and 42 percent to Canada, were the principal factors behind these increases in value and volume. Pork production in Japan is expected to recover in 1970, so it is doubtful that the high level of exports achieved in 1969 will be maintained.

Replacing tallow and greases, hides and skins exports became the No. 1 export item in 1969, at \$151.7 million. The value of hides and skins exports had reached a peak at \$154.7 million in 1966 and until 1969 had trended steadily downward. Larger cattle hide shipments to Japan as well as higher unit prices accounted for most of the increase in value during 1969. For 1970, a slight increase is expected in U.S. cattle hide exports, with increased shipments to Japan and Italy offsetting the declines expected in shipments to the USSR and other Eastern European countries.

Tobacco Exports Still Near Record

U.S. exports of unmanufactured tobacco leaf in December totaled 77.3 million pounds for a value of \$76.9 million, compared with 63.6 million pounds for a value of \$57.8 million in December a year ago. Both quantity and value of leaf exports were at record levels for the month.

Exports of tobacco products were down during the month, having a declared value of \$14.3 million, compared with \$16.5 million in December 1968.

Cumulative for the calendar year 1969, exports of unmanufactured leaf reached near-record levels with a total of 577.2 million pounds. These shipments were about 3.6 percent less than the high level of the previous year but were more than 10 percent above the 1963-67 average; 1969 was the third largest year for tobacco exports. The declared value, of \$539.8 million, was 2.9 percent higher than in 1968 and an alltime record. The average price of unmanufactured leaf exports in 1969, 93.5 cents per pound, compares with 87.6 cents in 1968. This increase reflects improved quality of U.S. leaf and a larger quantity of shipments of higher priced stemmed leaf and strips.

The quantity of flue-cured shipments, the major kind of U.S. leaf, was down about 3.1 percent in 1969 from the relatively high level of the previous year although it was nearly 7.5 percent above the 1963-67 average. Burley shipments

totaled 52 million pounds, one-fifth more than in 1968 and a near record, exceeded only by the 53 million pounds in 1963.

Tobacco products exports during 1969 were down from the relatively high level of 1968 with cigarette exports down about 5.5 percent and smoking tobacco in bulk down about 6 percent. The total declared value at \$156 million was down 3.3 percent from the \$161.3 million in 1968 but about 14 percent higher than the \$136.9 million in 1967.

U.S. EXPORTS OF UNMANUFACTURED TOBACCO
[Export weight]

Kind	December		January-December		Change from 1968
	1968	1969	1968	1969	
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	Percent
Flue-cured	50,704	58,333	443,538	429,750	-3.1
Burley	2,661	6,518	42,793	51,988	+21.5
Dark-fired					
Ky.-Tenn.	1,361	2,028	20,529	21,143	+3.0
Va. fire-cured ¹ ..	343	364	5,002	4,383	-12.4
Maryland	136	1,156	13,786	10,415	-24.5
Green River	15	—	518	440	-15.1
One Sucker	—	16	1,042	435	-58.3
Black Fat	183	246	2,548	1,126	-55.8
Cigar wrapper ...	236	82	4,565	2,222	-51.3
Cigar binder	25	18	2,152	868	-59.7
Cigar filler	18	61	607	612	+0.8
Other	7,960	8,490	61,720	53,854	-12.7
Total	63,643	77,312	598,800	577,236	-3.6
	Mil. dol.	Mil. dol.	Mil. dol.	Mil. dol.	Percent
Declared value ..	57.8	76.9	524.4	539.8	+2.9

¹ Includes sun-cured. Bureau of the Census.

U.S. EXPORTS OF TOBACCO PRODUCTS

Kind	December		January-December		Change from 1968
	1968	1969	1968	1969	
Cigars and cheroots					Percent
1,000 pieces ...	3,590	2,930	65,790	65,463	-0.5
Cigarettes					
Million pieces ..	2,589	2,329	26,461	24,993	-5.5
Chewing and snuff					
1,000 pounds ..	—	4	209	33	-84.2
Smoking tobacco					
in pkgs.					
1,000 pounds ..	441	76	1,787	1,054	-41.0
Smoking tobacco					
in bulk					
1,000 pounds ..	2,779	1,623	21,569	20,269	-6.0
Total declared value					
Million dollars ..	16.5	14.3	161.3	156.0	-3.3

Bureau of the Census.

Zambia Encourages Tobacco Expansion

It is reported that the Tobacco Board of Zambia is recruiting subsistence farmers for a nationwide scheme under which each would be required to grow one acre of flue-cured tobacco. The intent of the plan is to increase production, which has been declining since the country's independence. A



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pilot project has been initiated in the Western Province.

Total tobacco production—most of which is exported—dropped to 12.0 million pounds in 1969 from a record of 28.4 million pounds in 1964. About 90 percent of the total output is flue-cured tobacco.

There is concern among Zambia's tobacco industry that unless the downward production trend is reversed, the country will be unable to attract enough foreign buyers and so will lose its present world markets.

Weekly Rotterdam Grain Price Report

Current prices for imported grain at Rotterdam, the Netherlands, compared with a week earlier and a year ago, are as follows:

Item	February 5	Change from previous week		A year ago
		Dol. per bu.	Cents per bu.	
Wheat:				
Canadian No. 2 Manitoba	2.01		+1	2.03
USSR SKS-14	(¹)		(¹)	1.95
Australian Prime Hard	(¹)		(¹)	(¹)
U.S. No. 2 Dark Northern Spring:				
14 percent	1.94		+3	1.90
15 percent	2.01		+3	1.95
U.S. No. 2 Hard Winter:				
13.5 percent	1.77		+1	1.85
Argentine	1.77		+4	1.84
U.S. No. 2 Soft Red Winter	1.66		0	1.73
Feed grains:				
U.S. No. 3 Yellow corn	1.58		+7	1.39
Argentine Plate corn	1.56		+7	1.42
U.S. No. 2 sorghum	1.56		+9	1.38
Argentine-Granifero	1.36		+9	1.27
Soybeans:				
U.S. No. 2 Yellow	2.98		+2	2.92

¹ Not quoted.

Note: All quoted c.i.f. Rotterdam for 30- to 60-day delivery.

Venezuelan Corn Imports

In the face of a developing corn shortage attributed to adverse weather conditions Venezuela's Agricultural Bank (BAP) recently signed a contract with corn flour producers to provide them with 121,000 tons of white corn to supply the requirements of the milling industry. BAP announced that at least 126,000 metric tons of corn will have to be imported in order to meet any emergencies which might arise. This will bring the total expected white corn imports to 150,-

000 metric tons. Imports of yellow corn are expected to reach 96,000 metric tons and will be used by the animal feed industry.

Jesús Escheverría, Acting President of BAP, stated that the white corn crisis has caused Venezuela to move rapidly to secure corn imports. He said that 80,000 metric tons have been acquired from Argentina, 2,000 tons from Colombia, and the remainder will come from the United States. BAP is also talking with African countries to try to obtain whatever surpluses of white corn might be available there.

In an effort to preclude the development of such a situation next year, BAP is providing more credit under more liberal terms for the planting of corn. Additional land will be planted to corn—9,000 hectares in Delta Amacuro and 4,000 hectares in the State of Trujillo.

Large Yugoslav Prune Crop

Excellent bloom, favorable weather conditions, and larger bearing acreage combined to produce a large 1969 Yugoslav fresh prune crop of 1.4 million short tons. Current reports indicate that the dried prune portion of the crop totaled 35,000 dried tons, 2.5 times the 1968 production of 14,100 tons and 26 percent above the 5-year 1961-65 average. Some sources indicate that the pack may even exceed 40,000 tons. The major portion of the remaining fresh tonnage was processed for brandy.

Sharply higher exports of dried prunes are forecast for the 1969-70 season. Substantial tonnage of 1969-crop prunes has been included in the "Commodity list" of trade agreements with Eastern European countries. Exports to all countries are forecast at 24,000 tons, more than 3 times the 1968-69 season total of 7,000 tons. Approximately 75 percent of this total is expected to be exported to Eastern European markets.

SUPPLY AND DISTRIBUTION OF YUGOSLAV DRIED PRUNES

Item	1966-67	1967-68	1968-69	1969-70 ¹
	1,000 short tons	1,000 short tons	1,000 short tons	1,000 short tons
Beginning stocks (Oct. 1)	2.3	5.0	6.6	2.8
Production	20.0	25.2	14.1	35.0
Total supply	22.3	30.2	20.7	37.8
Exports	8.0	14.0	7.7	24.0
Domestic disappearance	9.3	9.6	10.2	9.1
Ending stocks (Sept. 31)	5.0	6.6	2.8	4.7
Total distribution	22.3	30.2	20.7	37.8

¹ Forecast.